of paragraphs (a) and (b) of this section must be determined on the basis of:

- Oil handling rates of the deepwater port;
- (2) Volume of oil susceptible to being spilled;
- (3) Frequency of oil transfer operations at the deepwater port;
- (4) Prevailing wind and sea state condition at the deepwater port;
- (5) Age, capability, arrangement of, and the licensee's experience with the oil transfer system equipment at the deepwater port; and
- (6) Whether the discharge containment and removal material and equipment is shared, and the expected frequency of use and probability of availability.

§149.321 Special requirement for onloading ports.

Each deepwater port at which onloading operations are permitted, under section 4(a)(3) of the Act, must have a means for receiving oily residues from vessels.

Subpart D—Safety Equipment

§149.401 Applicability.

This subpart prescribes requirements for safety equipment that apply to each deepwater port.

§149.402 Equipment not required on a PPC.

Each item of lifesaving and fire fighting equipment on a PPC that is not required by this subpart must be approved under 46 CFR Part 160 or Part 162.

CURBS, GUTTERS, DRAINS, AND RESERVOIRS

§149.403 Curbs, gutters, drains, and reservoirs.

Each platform must have enough curbs, gutters, drains, and reservoirs to collect all of the following discharges and wastes in the reservoirs:

- (a) All discharges from equipment, maintenance shops, and refueling facilities.
- (b) All laboratory, sanitary, galley, and deck cleansing wastes, and similar wastes. Sanitary waste includes the

waste from baths, showers, sinks, wash bowls, laundry, toilets and urinals.

EMERGENCY POWER

§149.411 Emergency power.

- (a) Each PPC must have emergency power equipment to provide power to operate all of the following simultaneously for a continuous period of eight hours:
 - (1) Emergency lighting circuits.
 - (2) Aids to navigation equipment.
 - (3) Communications equipment.
 - (4) Radar equipment.
 - (5) Alarm systems.
 - (6) Electrically operated fire pumps.
- (7) Other electrical equipment designated in the Operations Manual by the licensee.
- (b) No emergency power generating equipment may be located in any enclosed space on a platform that contains oil transfer pumping equipment or other power generating equipment.

MEANS OF ESCAPE

§149.421 Means of escape from platform.

- (a) Each platform must have at least one fixed and one unfixed means of escape from the highest working level to the water level with an entry at each working level.
- (b) Each platform with living spaces must have at least two fixed means of escape from the highest level with living spaces to the water with an entry at each level below. If the highest level of the PPC contains living spaces, the two fixed means of escape required by this paragraph satisfy the requirements in paragraph (a) of this section.
- (c) Each platform must have at least one fixed or unfixed means of escape for every ten persons on board the platform, including the means of escape required under paragraphs (a) and (b) of this section.
- (d) When two or more fixed means of escape are installed, at least two must be as far from each other as practicable.
- (e) Each fixed means of escape required under this section must be a steel ladder or steel stairway.
- (f) Each unfixed means of escape required under this section must be:
- (1) A portable ladder;

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- (2) A flexible ladder; or
- (3) A knotted man rope.
- (g) Two exits must be provided from each space having over 300 square feet of floor area. Where practicable, the exits must give egress to different corridors, rooms, or spaces.
- (h) Exits must provide egress to the external means of escape required in this section. Dead end corridors may not be longer than 40 feet.

§149.423 Means of escape from helicopter landing pad.

Each helicopter landing pad on the PPC must have at least two fixed means of escape that are independent of those required by §149.421:

- (a) From the pad to the first working level below the pad or the water; and
- (b) As far from each other as practicable

PERSONNEL LANDINGS

§149.431 Personnel landings.

Each PPC must have at least two personnel landings for access to the platform from the water unless:

- (a) Personnel landings are not possible because of the PPC design; and
- (b) The PPC has a personnel basket transfer system.

§149.433 Personnel landing illumination.

Each personnel landing must have at least 1 foot-candle of artificial illumination on its guard rails or fence and on its deck.

GUARDRAILS, FENCES, NETS, AND TOEBOARDS

§149.441 Open sided deck, deck opening, catwalk, and helicopter pad protection.

- (a) Each open sided deck, deck opening, and catwalk on each PPC must have protection that meets the "Safety Requirements for Floor and Wall Openings, Railings, and Toeboards" of the American National Standards Institute (ANSI A12.1), except each must have toeboards
- (b) Each open side of each helicopter landing pad on the PPC must have:
 - (1) Safety net; or
- (2) A lowered walkway that is 48 inches wide, is not more than 42 inches

below the level of the pad, and has guard rails that meet the requirements of ANSI A12.1, except each must have toeboards.

FIXED FIRE MAIN SYSTEM FOR WATER

§149.451 Fixed fire main system for water.

Each PPC must have a fixed fire main system for water.

§149.453 Fire pumps.

- (a) Each PPC must have at least two independently driven fire pumps that can deliver two streams of water at a continuous pitot tube pressure of at least 75 p.s.i. at each fire hose nozzle.
 - (b) Each fire pump must have:
- (1) A relief valve on its discharge side that is set to relieve at 25 p.s.i. in excess of the pressure necessary to meet the requirement in paragraph (a) of this section;
- (2) A pressure gauge on its discharge side; and
- (3) Its own water source.
- (c) Fire pumps may only be connected to the fire main system.

§149.455 Fire pump location.

The fire pumps required by §149.453(a) may not be located in the same space.

§149.457 Fire hydrants.

- (a) Each part of the PPC that is accessible to any person, except machinery spaces, must have enough fire hydrants so that it can be sprayed with at least two spray patterns of water. At least one spray pattern of water must be from one length of hose.
- (b) Each PPC must have enough fire hydrants so that each machinery space can be sprayed with at least two spray patterns of water from separate hydrants. Each spray pattern of water must be from one length of hose.
- (c) A single length of fire hose, with nozzle attached, must be connected to each fire hydrant at all times.

§149.459 Fire hydrant outlet.

The outlet on each fire hydrant must not point above the horizontal.